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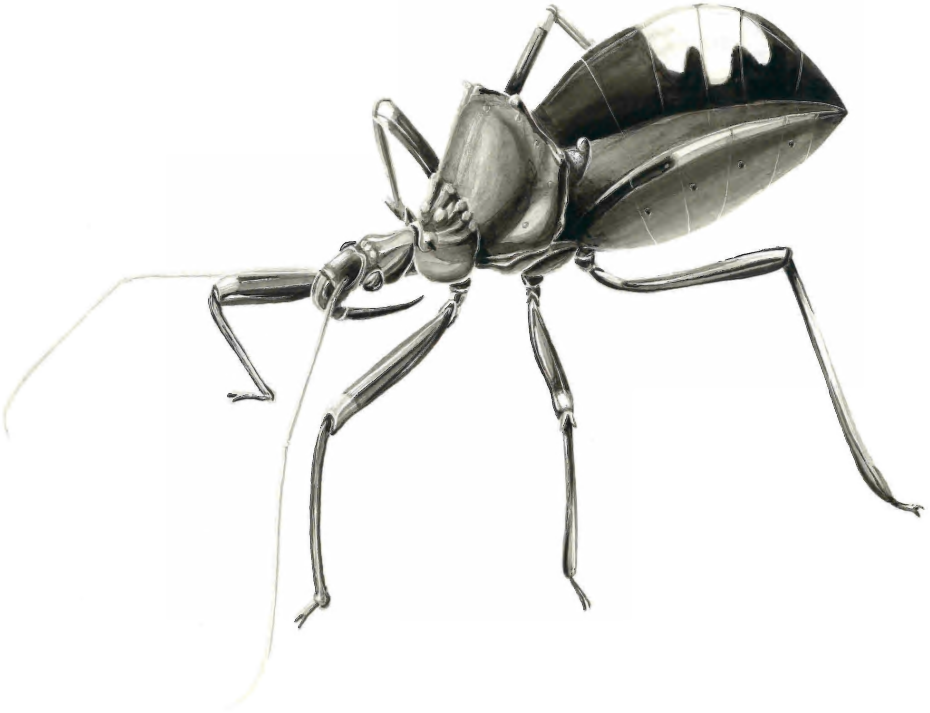

Front Cover: Image of an assassin bug submitted to the AES Illustration Competition by Luke Davies.

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NOTICE

Statements made in *Myrmecia* do not necessarily represent the views of the Australian Entomological Society.

ANNUAL REPORTS

Executive's report

The AES Executive has met monthly since the 2006 AGM dealing with the run-of-the-mill matters which face most societies – we get a large amount of email from FASTS as part of our correspondence although much of this is for information only. Probably the most significant change has been the adjustment of the society year from calendar to financial so that the membership subscription period coincides with the financial reporting period. This has created some confusion for members who do not read *Myrmecia* and who found themselves receiving two invoices within six months of each other but Graham has taken great patience in explaining what the change has meant and the fact that no member is actually out of pocket.

A more welcome change is the resurrection of the AES research grants scheme funded by interest generated by the ICE 2004 profits. Details were provided in the August issue of *Myrmecia* and the deadline for applications is 31st October. These grants are for a maximum amount of $2000 each and are designed primarily to support small, short-term projects. Conference travel will not be supported and applicants need to be members of the society. A short summary of the outcomes of the project, preferably with illustrations, will be required for publication in *Myrmecia*.

The other outcome of the ICE profits has been completion of the digitisation of all back issues of the Society's journal from its foundations as the *Journal of the Entomological Society of Queensland*, through the *Journal of the Australian Entomological Society* (yellow version, then the red journal) to its transformation to the *Australian Journal of Entomology* in 1998. The issues published in the last decade are subject to agreements with the publisher and are available only to subscribers. We chose to make the older issues free to air and to keep them as property of the Society so we can maintain control over their use but we acknowledge the support of Blackwell Publishing's staff in getting these issues prepared and for hosting them on the Wiley Blackwell website. We also acknowledge the support of the Entomological Society of Queensland who gave permission for the first seven volumes to be included in this process to ensure the complete set was available.

The Society's Public Officer, Jane Wright, is also now our Privacy Officer to ensure that the activities of the society do not contravene privacy legislation. This was part of a series of governance issues passed on to us by the previous executive and we thank Jane for once again making herself available to support the society. A special mention too of Heather Cosson-Williams who has given Jane (and the Society) considerable support in the AES shop, particularly at Society conferences. During the year, we farewelled our Membership Secretary, Andrew Mitchell, who relocated from Orange to Wagga late in 2006 and the responsibilities of this role are now being undertaken by Graham Thwaite.

As the Executive, one of our roles is to ensure the continuation of the society, particularly reporting society activities and financial status to members at an annual general meeting. Traditionally, the AGM is associated with our annual scientific conference and members in each Australian state take their turn at hosting the meeting. All previous AES conferences are listed on

the society's website, many with a photographic record of the meeting. At our last AGM, a proposal to have a joint conference with the Australasian Plant Pathology Society in Sydney in 2009 was put to members after a presentation from Rob Magarey, President of APPS. Early discussions between the AES Executive, Rob Magarey, and the CEO of the CRC National Plant Biosecurity, Simon McKirdy, came up with a model for this proposed joint conference which had parallel sessions of specific interest to either discipline and joint sessions on areas of overlap such as biocontrol, biosecurity, vector biology, entomopathogens, taxonomy and so on. The CRC committed $50,000 sponsorship for the meeting. In order for NSW to host the 2009 meeting, we needed another state to take 2008. We tried to motivate our NT members to host the 2008 conference which would enable a conference in NSW in 2009 before it headed west in 2010. However, NT members are few and far between and they were unwilling to commit to such an undertaking so we decided to do the 2008 meeting in Orange as a last hurrah for the current executive. We felt that this was not going to be a major problem with NSW also hosting the 2009 joint conference because they would be very different meetings, the 2008 expected to be a relatively small meeting in a regional location (such as the Beechworth meeting this year) and the joint meeting being in Sydney and expected to attract between 600 and 1000 delegates. Unfortunately, the NSW members of APPS, being unaware of these discussions involving the national executive of their society, had already made plans for their 2009 conference and were unwilling to adapt to a much bigger conference with AES involved. Their preference was to have two separate conferences with a single day overlap for topics of common interest to both disciplines. This would have meant a separate organising committee for each society and two consecutive AES conferences organised in NSW. We did not think this was acceptable. The model of two separate, albeit overlapping, conferences was also rejected by the CRC and their funding support was withdrawn since the hoped-for interaction between the two disciplines would not be achieved. Consequently, we are again looking at NT for the 2009 conference and if they are unable to host the event, then it will be WA's turn again. In the meantime, plan to visit Orange, in the dress circle of NSW, in September 2008. More details later in this meeting.

In addition to planning where future AES conferences will be hosted, we have also initiated discussion about where the next Executive will be hosted when we finish our term at the 2008 conference. We are hopeful that Tasmania will be able to take on these roles since the Executive has not operated from Tasmania previously.

The Executive has worked well this year and it has been a bonus having Aaron Simmons at each meeting as editor of *Myrmecia*. Geoff and Graham have spent considerable time on AES business on your behalf and they deserve your thanks for keeping the Society progressing well. Before finishing, I would like to acknowledge the clerical support the executive has received over the past year from Jenni Tarleton, Paula Crain and Carmen King and to thank John Betts, the manager of Orange Agricultural Institute for allowing us to purchase such high quality clerical support at minimal cost.

Finally, the society's website is www.austentsoc.org.au and I encourage members to visit it as often as possible. The site has been hosted by NSW DPI since 1999 but it appears that we may need to look for an alternative host, possibly even a commercial ISP, for the site in the not too distant future.

Murray FLETCHER

Vice President

Chairman of the Executive

Treasurer's Report

The initiatives taken since the 2006 AGM have included the completion of the task of digitising the pre-Blackwell issues of the Society and ESQ journal at a final cost of $16,647. The entire series of the journal is now available electronically. The pre-Blackwell series is hosted by Blackwell Publishing and is available to anyone and at no cost. The saving of $5,591 on the original quoted price has been added to the pool for the Small Research Grants. We continue to hold around $10,000 in reserves for the Education Initiative which looks like it will now go ahead.

The Financial Report shows a loss of $19,538. Hopefully this is a "one-off" during the term of the Orange-based Executive and is due to two main factors: collection of only half of the usual subscriptions because of the phasing in of the new Membership Year and substantial write-off of clothing stock carried over from the ICE. The remaining items will be donated to an appropriate charity. Thanks once again to Jane Wright and Heather Cosson-Williams who have continued to operate the "AES Shop" at Canberra.

Since this Executive took over in 2004, the Society has benefited technically, socially and financially from several well-run and profitable Conferences. The injection of the additional funds has allowed us to hold subscriptions at the level set early this decade and we see no need to change that at present. The Executive has also been able to continue to advance the Society without feeling it was under financial restraint. With the support of members attending Conferences, this situation should continue in the short term at least. Membership numbers remain a concern especially as our current contract with Blackwell is based on a minimum membership of 600. As reported elsewhere, membership has been at around 500 for the last two years.

From the beginning of the 2006/07 Financial Year, the audit company engaged by the Society has become part of a larger group and is now WHK Darcy Kennedy Audit Services. Only the name has changed, we still have Ron Winterton as Auditor and appreciate his continued assistance to the Society. I also acknowledge the clerical support given by Paula Cain and Carmen King during 2006/07.

Graham THWAITE

AJE Chief editor's report

Aims, scope and ongoing development of the Australian Journal of Entomology

The *Australian Journal of Entomology* is the premier vehicle for the publication of entomological research in the south-west Pacific region. It can only maintain this position if it continues to receive quality manuscripts and it minimizes the time between submission of a manuscript and publication of the paper. The Editorial Team, in conjunction with our publishers, Wiley-Blackwell Publishing, works hard to improve the stature of the Journal, maintain high standards of peer review and endeavour to minimise turn-around times. Members can participate in this process by submitting their high-level papers to the Journal and promptly handling papers that may be sent to them for review.

The Impact Factor of the Journal has maintained last year's level, standing at 0.727. It can further improve its standing through publishing a wider range of top-quality papers that are cited in other works and by extending its circulation. The Editorial Team has recently taken some initiatives aimed at consolidating and building the Journal's prestige.

Volume 45, Part 4 which was published in November 2006 was a special single-topic issue entitled 'Refining the ecological basis for agent selection in weed biological control', guest edited by S Raghu and Rieks van Klinken. It is hoped that such special issues can become a periodic production, and I welcome expressions of interest in topics.

All back issues of the Journal and its predecessors have now been scanned and went live online on 22 March 2007. They are available online to all members at the Blackwell Synergy web site.

Beginning in Volume 47 in 2008, we will incorporate a section entitled 'Overview' as a periodic piece in the Journal, under the Commissioning Editorship of Roger Kitching. The new section was ready to implement in late 2007 but it was decided to hold it off for commencement in Issue 1 of Volume 47 in 2008.

The intention with Overview is to present at the front of an issue of the Journal a short, serious, thought-provoking article on an area of entomology that is, or may become, a topic for vigorous scientific debate. Papers for Overview will be invited, but Roger or I welcome expressions of interest in proposals for topics. Our intention for Overview articles is to inform and stimulate the broader readership about current significant issues in entomology. They will not be conventional literature reviews, will not include new primary data and will have only a short list of key references.

In 2008 it is planned to introduce a range of innovations for the Journal. These include online submission of manuscripts through Manuscript Central, the implementation of Online Early publication and provision of Colour on Web for photographs and other illustrations that authors may wish to be available in colour (more below).

During the year Blackwell Publishing merged with Wiley to create Wiley-Blackwell. This merger has had no effect on the production of the Journal or the editorial team with whom we interact at the new entity.

Production

Production statistics for the *Australian Journal of Entomology* since the last AGM:

During the period July 2006-June 2007, the flow of manuscripts was (last year in brackets):

Manuscripts:	received	103* (93)
	accepted	41* (40)
	still in review	22
	rejected/withdrawn/lapsed after review	8
	rejected at submission	30
	total rejected	38(38)

*plus 16 for the special issue

The trend of a large number of submissions being received from countries in the region spanning the Middle East across to East Asia continues. With the exception of those papers where the work was carried out while the author was in Australia or where one of the co-authors is Australian, these submissions are almost exclusively either clearly outside the scope and aims of the Journal (most notably dealing with species that do not occur in, or have no relevance to, our region) or are of poor studies that are usually very poorly reported. There are virtually no

submissions in this category where the work is clearly of a high standard but has only been let down by the standard of English expression.

Acceptances run at around half of submissions.

Manuscript Central for online manuscript submissions

Blackwell Publishing had previously demonstrated their 'Manuscript Central' electronic submission and monitoring system to us. We continued to monitor this innovation but up until now I felt that the cost was prohibitive for a society of our size. Electronic processing of manuscripts is clearly the way of the future and it was only a matter of time before market penetration ensured that it becomes cost-effective for the Society.

I believe that time has arrived. We have had discussions with Wiley-Blackwell at the annual Editors' meeting held in July and the Society's Executive will be considering detailed proposals from Wiley-Blackwell and the costs of various options in this regard. I am hopeful that we can begin to implement online submissions through Manuscript Central early in 2008.

Volume	Part	Published	Pages	Papers
45	4	November 2006	114	16
46	1	January 2007	87	13
46	2	April 2007	80	12
46	3	July 2007	80	9

Online Early

Early publication online is becoming commonplace and it will be available for the Journal from Issue 1 of Volume 47 in 2008. The cost for Online Early publication is $45 + GST which I regard as good value for a service that can see papers published online many months earlier than in print. All authors will be advised of the availability of this service when their paper is accepted.

Early electronic publication will not be available for taxonomic papers where such publication might compromise the requirements of the International Code of Zoological Nomenclature. Ken Walker, as Technical Editor dealing with taxonomic papers, will be the arbiter of this.

Colour on the Web

Printing of figures in colour is available in the Journal but the cost is often prohibitive. A new, free, innovation is implementation of Colour on the Web (CoW) which provides colour in the online version of published articles. This also means that the .pdf file provided to each author will have colour figures. The image, which must be the same source file, would be printed in B&W in the printed version of the Journal.

Performance and promotion

The availability of Wiley-Blackwell's journals electronically, links to the Google search engine and the online availability of all back issues of the Journal have increased dramatically the online utilisation of the Journal. In 2005, article downloads (full text, abstract, references, table of contents) averaged 4743 per month. In 2006 they averaged 7913 per month. For 2007, to the end of May, the monthly average total downloads was 15384. The main cause of this surge was clearly the availability online of the back issues: downloads totalled 21278 in April and 23606 in May.

The impact factor of the Journal was 0.495 in 2002, 0.433 in 2003, 0.486 in 2004, 0.729 in 2005 and 0.727 in 2006.

Wiley-Blackwell continues to target the Journal at exhibitions at relevant major conferences and meetings, direct marketing through promotional material, especially in Europe, North America and East Asia, and through advertising in other Wiley-Blackwell journals. The publisher reports comprehensively on all scientific, circulation and marketing metrics and initiatives for the Journal at the annual Editors' meeting which is held around July-August. I also encourage members to visit the Journal's web site at http://www.blackwellpublishing.com/AEN for information on the Journal.

Editorial team

There has been one addition to the Technical Editor team during 2006. I welcome Andrew Loch who took on the role of a Technical Editor during the year. Ken Walker, Grant Herron and Tom Chapman and Tim Heard continue to contribute great service to the Society as Technical Editors, as does Roger Kitching as commissioning Editor for 'Overview'. Thank you to all the Technical Editors for their hard work.

The members of the production team at Wiley-Blackwell (Rose Williams, Eugene Tan and Suneel Jethani) have been vital in the smooth running of the journal and in meeting production schedules. Their professionalism, enthusiasm and dedication make them a pleasure to work with.

On behalf of the Technical Editors I also thank the Editorial Board and the many referees who have given expert opinion on manuscripts. These contributions are vital to satisfying both readers and authors and enhancing the status of the *Australian Journal of Entomology*.

John MATTHIESSEN

Chief Editor

Membership Secretary's report

Andrew Mitchell transferred from Orange to Wagga Wagga NSW in early 2007. I offered to fill the role of Membership Secretary for the time being. The 2006 AGM resolved to change the Society Constitution to alter the Membership Year from January to December to align with the Financial Year, July to June. Two lots of invoices have been mailed since the last AGM to phase in the change, the first in December 2006 for the six-month period January to June 2007 and then again in July for the full year, July 2007 to June 2008. Members have adapted readily to the change.

Membership has stabilised after the sharp decline between 2005 and 2006. Membership is the

most serious challenge for the current Executive. Many long-standing members are retiring and some are choosing to resign while others have elected to take up the Retired Member category. Still other members are finding jobs are taking them away from Entomology so are choosing to resign from the AES. New members are joining but more are needed to counteract resignations if we are to hold membership at its current level.

The table below shows the trends:

Category	**At 30 June 2005***	**At 30 June 2006***	**At 30 June 2007**
Honorary	6	5	5
Full members	439	368	366
Retired members	91	86	89
Joint membership	18	16	15
Student members	48	36	34
Affiliated Societies	3	3	3
Sustaining Associates	2	1	1
TOTAL	**606**	**515**	**513**
Myrmecia subscriptions	18	19	19

*Source: 2006 Report to AGM

Since the last AGM, the following members have passed away:

Eric Reye 29/01/07

Ray Kumar 23/08/07

Elizabeth Exley 1/09/07

There have been eight resignations in the 2006/07 year and a further seven between 1 July and 31 August 2007. The latter are not included in the table above. Sixteen people joined the Society during 2006/07, one upgraded from *Myrmecia* only. A further two joined and one upgraded since 30/06/07. At 30/06/07, there were 34 members in arrears from 2006 who were advised that their membership risked being terminated at 31/08/07. Only 14 of these responded.

Graham Thwaite

Education committee's report

The main activity of the education committee through 2007 has been in the preparation of applications for funding to create a cooperative curriculum based on remotely-offered courses delivered by a consortium of universities. Expressions of interest were submitted to the Collaborative and Structural Reform Fund (CASR) as well as the Competitive Grants scheme of the Carrick Institute in April 2007.

The CASR project was not successful, however the Carrick Competitive Grant scheme proposal was accepted and invited to proceed to the next step. A full application was submitted in August 2007 and on 13th September we received the good news that the project has been approved.

The main aims of the project are to develop four 3rd level undergraduate subjects in entomology that will be developed and offered through a consortium of universities: University of Queensland, Charles Sturt University, the University of Adelaide and the University of Western Australia. The project will cover two years and involve a budget of $141K in year 2008 and $112K in 2009. Of this, a total of $43K is cash support from the Australian Entomological Society, the Entomological Society of Queensland, the University of Queensland, Charles Sturt University and Grains Research and Development Corporation. One of the first steps will be to consult with entomological educators throughout Australia to see how the proposed national subjects can dovetail with existing subjects.

The committee is grateful to the following for their support and input into the application Geoff Gurr (CSU), Helen Spafford (UWA), Mike Keller (UA) and Nigel Andrew (UNE).

In preparation for the Carrick Grant application, David Merritt attended a Carrick Institute colloquium "Collaborating to Offer Small Courses/Subjects" at University of New England, Armidale NSW in May 2007.

Appendix: Project Description

This proposal has come about through a recognition by professional entomologists that the ongoing decline in entomological education will inevitably lead to a reduction in quality and availability of entomologists to meet Australia's future needs. Emerging issues such as market globalisation, biosecurity imperatives, the biodiversity focus, management of pesticide resistance and utilisation of GMOs indicate Australia will experience a steady demand for entomologists.

The primary aim of the Australasian Entomology Education Strategy is to develop a comprehensive educational program in Entomology, to be delivered through a consortium of several partnering Australian universities. Courses will initially be targeted at the third level of a 3-year Bachelor's degree, and will be based on flexibly-delivered, remotely offered coursework. The program will draw on a cross-national pool of academic staff, leading to economies of scale in the cost to universities to teach these fields. Courses will be implemented using a flexible delivery model, and will use cross-promotion to draw on an international student base. Courses will be developed based on existing course-work and expertise throughout Australia's universities.

A second aim is to offer tailored courses for vocational training and professional development for entomology practitioners. This presents an opportunity for Australian universities to meet an emerging, but relatively untapped, international market for professional accreditation and training. End-users within this market include entomologists within government agencies, as well as para-professionals, such as laboratory technicians and pest controllers in urban and rural industries. The educational model being proposed is adaptable for the type of specialist, short-

term workshops that are required in this field.

Effective flexible course delivery has already been tested on a local scale from some institutions. We have learnt that academic material needs to being tailored specifically to a remote audience, and support personnel required to produce graphics and publish material in online formats. Executive support will also be required for administration of the consortium model itself, and we are able to learn from the experiences of other consortium models in this respect: the Tropical Marine Network and the Biostatistics Collaboration of Australia are two examples.

Several meetings have taken place to establish a working model for the entomology curriculum and discuss course content and academic teams. Professional societies such as the Australian Entomological Society and the Queensland Entomological Society have indicated cash support. Financial support from several Research and Development Corporations will also be sought. Because the courses have the potential to draw on a wide student base, enrolments in individual courses are projected to reach a self-sustaining level after 5 years.

Dave MERRITTt

Convenor

AES Education Committee

Myrmecia editors report

First and foremost, many thanks to all contributors, regional councillors and the executive committee for their effort in collating information on the activities of AES members. This year has ticked by rather quickly and things are now running quite smoothly on the IT and printing fronts. Contributions appear to be growing and there have been many delightful submissions. I would like to single out the Cairns Tsunami contribution from Tony Postle in the May issue as being the standout contribution for this year so far.

Some, though very few, people may have noticed that the Crossword and Braindrain disappeared sometime ago. I made a deliberate mistake in both one issue and I did not receive one complaint. Silence can say a quite of a lot!

There have been numerous advertisements, such as employment opportunities and conferences, this year that I hope members have found useful. There is only a charge to advertise in *Myrmecia* if it is of a commercial nature, announcements that are of general interest to members are free of charge and I encourage people to continue submitting these items for inclusion. Please track down your regional councillor (by opening to the back cover of any recent edition of *Myrmecia*) and pass it on. This also applies for activities in your workplace or home of an entomological nature.

I look forward to continuing *Myrmecia* in 2008 and working with the people I have to date.

Aaron SIMMONS

REGIONAL NEWS

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NT Department of Natural Resources, Environment and the Arts

Aquatic Health Unit

NRETA's Aquatic Health Unit ran the first 'NT macroinvertebrate sampling training course' on 28/9 August 2007. Aquatic macroinvertebrates are mainly insect larvae, but also shrimps and mussels etc that are used to determine how healthy a waterway is. The course was initiated because macroinvertebrate sampling is being carried out by more and more NT-based organisations wanting to assess stream health and also to comply with monitoring requirements of wastewater discharge licences.

The course targeted a broad range of interest groups, including industry, non-government and government organisations, students and the general public. The course focussed on teaching participants best practice sampling techniques in a field exercise. A day of theory also provided basics on how to gather and analyse data using the Australian Rivers Assessment System AUSRIVAS and other data analysis methods. The course was well-received, with comments ranging from 'thanks', 'great having a range of experts around' to 'excellent, learned a lot'.

Charles Darwin University - School for Environmental Research

The School is hosting two external entomological PhD students. **Anna Schmidt** is from the University of Regensburg in Germany, and is studying the unique mound-building behaviour of Meridional ("Magnetic") Termites *Amitermes meridionalis* from an evolutionary and genetic perspective. She is now undertaking her final spell of field work before returning to Germany for laboratory analysis and write-up. Her work involves manipulation of mounds to test hypotheses about their adaptive significance, and genetic analyses to examine whether local differentiation in mound alignment is adaptive or the result of genetic drift. For more information, visit Anna's web-site, http://www.biologie.uni-regensburg.de/Zoologie/Heinze/Staff/AnnaSchmidt/index_en.html.

Siobhan Delittle from the University of Tasmania is working with our mosquito project group. Using a combination of field trials, geospatial statistics, multi-model inference and stage-based matrix modelling, her project involves developing models that describe the mosquito productivity of the extensive and diverse swamp complexes near Darwin, the impacts of the current mosquito control regimes, and predicting the consequences of climate change for these swamps. They have been managed for the last 20 years to control mosquitoes and thereby reduce the exposure of the human population to mosquito-borne diseases. They support many species of mosquitoes, including *Aedes vigilax* and *Culex annulirostris*, vectors of Ross River Virus and Murray River Encephalitis.

CSIRO Sustainable Ecosystems – Tropical Ecosystems Research Centre

Dr Ben Hoffman: Pest ant update

CSIRO is still leading the way in the management of pest ants in northern Australia. Drawing on our investigations into invasion ecology and the impacts of pest ants, we're developing improved

techniques and assisting with the eradication of pest ants.

Eradication update

Crazy ant eradication work in NE Arnhem Land is yielding great results this year, with 10 infestations covering 60 ha already declared eradicated. We hope to double this figure by the end of the year. Our assessments are being aided by 5 crews of conservation volunteers. We are aiming to collect assessment information from 150,000 point locations this year. Two crews have already sampled more than 70,000 locations. This information can then be analysed for treatment success relative to treatment conditions, products and environmental variables.

A second project investigating mine site rehabilitation at the Alcan bauxite mine in Gove has commenced, with one of two samples to be collected this year already completed. CSIRO is part of a larger collaborative effort to study rehabilitation progress on a wide variety of biota and flora.

Big headed ants have now been declared eradicated from Brown's creek on the Daly River, and are likely to be eradicated from the Tiwi Islands soon. The fight against Tropical fire ant on the Tiwi Islands continues.

Community awareness

Eradication work is ongoing as is building community awareness of pest ant issues. Currently we're compiling a pest ant knowledge book aimed at an Aboriginal audience with a view to behaviour change. The book will identify the pest ants of greatest concern and how the community can avoid transporting them in soil and other materials.

Ant students

CSIRO Sustainable Ecosystems Darwin has been fortunate again this year to have the assistance of around 25 international students, as part of the lab's student trainee program. There's considerable interest from students from France, Brazil, Belgium and Germany who come to gain practical and research experience with the Division's scientists as a component of their university degrees. Most are completing agronomy, geography and natural resource management degrees. Students appreciate the insight into research work in some spectacular locations, before they make final decisions about their careers. For the lab, the constant stream of new students provides renewed energy, enthusiasm and fresh eyes for the diversity of work being covered.

Students are assisting with major research projects within the group, including Burning for Biodiversity & Invertebrate biodiversity. They not only conduct field work, ant identification and specimen mounting but also have the opportunity to devise, implement and report on their own supervised projects within larger research objectives. Some have contributed to publications from the group.

Case study

Laura van Ingen, a recent CSE student from France, was involved in an invertebrate survey in the Mitchell River National Park, located on the Mitchell Plateau in the Kimberley region, as part of a collaborative Bushfire CRC project with the WA Department of Environment and Conservation. Laura, along with Brazilian student **Kelly Spena**, had the opportunity to assist with surveys and visit one of the most scenic and biologically important areas of Western Australia.

"Small patches of rainforest grow around the margins of the plateau, where they are protected from fire and receive additional moisture," said Laura. "This study is comparing invertebrate biodiversity between burnt and unburnt plots. "We stayed at the ranger station of the National park for one week to sample two sites (burnt and unburnt). This ranger station is over a day's drive from Kununurra including several river crossings, and only the first hour of the drive is on bitumen!" Laura and Kelly enjoyed extra activities including helicopter rides and fishing in this extraordinary area – for which we can be thankful for these stunning snaps!

Chris PALMER

TASMANIA

University of Tasmania

School of Agricultural Science and TIAR

Tanya Joffe arrived from Pretoria, South Africa in August to start a PhD with **Geoff Allen** (UTas) and **Robyn Gunning** (NSW DPI, Tamworth) on pyrethrum through funding from Botanical Resources Australia (BRA). BRA produces over 30% of the world's botanical insecticide pyrethrum by contracting growers in Tasmania to cultivate some 8,000 tonnes of flowers a year. Tanya stayed in Hobart for a week before heading up to Tamworth where she will be based at the NSW DPI research station. In September, **Paul Walker** recommenced his regular trips to the Surrey Hills tree plantations in northern Tasmania in search of spring beetles (*Heteronyx* spp.). The flight season has got off to a slow start this year due to cool, wet and windy weather. **Lisa Bird** completed the analysis of eucalypt leaves to measure the foliar concentration of imidacloprid in stem-injected trees as part of **Jane Elek's** (Forestry Tasmania) chrysomelid trap tree project.

Department of Primary Industries and Water

Cathy Young was kept extra busy in September after large flights of the redheaded cockchafer (*Adoryphonous couloni*) hit southern Tasmania. Cathy reports: springtime in Hobart this year was ushered in by unprecedented large flights of *A. couloni* (Dynastinae; Pentodontini), causing consternation among many residents wanting know the identity of the large reddish-brown beetle piling up against walls and attracted to light in large numbers. Southern farmers too, who until recently have only had to deal with other scarabs and corbies in the pasture pest suite, are now faced with a new, untreatable scarab in pastures that have been severely depleted by drought. The redheaded cockchafer is native to South Australia, NSW, Victoria and Tasmania where it is considered a pest of pasture and turf as it feeds on grass roots. It is difficult to detect and treat because of its subterranean lifestyle. Grasses with weak, fibrous root systems such as perennial ryegrass in improved pastures are especially vulnerable to damage. Before 1987, this scarab was confined to King Island and northern Tasmania and it was thought that the cold high plateau around Oatlands in the centre of Tasmania prevented its spread to the south of the state. However, since then, the beetle has rapidly dispersed to the south of the state and regularly appears in many districts on the east coast and around Hobart. The reason for this expeditious southwards push is unknown. It is likely that large numbers of third instar grubs, developing from eggs currently being laid by adult beetles, will cause noticeably serious damage in pastures and turf in autumn 2008.

Cathy also reports that a new insect genus for Tasmania was recently discovered in the Department's state invertebrate collection. An undescribed species of the parasitic wasp genus

Oxyscelio (Platygasteridae) was found by University of Adelaide student, Ms **Sally Thompson**, during a visit to the renowned collection housed at the New Town Research Labs. Ms Thomson will describe the species as part of her PhD studies.

Paul WALKER

SOUTH AUSTRALIA

The University of Adelaide

In mid September, **Andy Austin** and **John Jennings** held a retreat for 15 members of their lab group at the Flinders-Baudin Research Centre on Kangaroo Island. Andy, John, **Sally Thompson** (PhD student), **Lars Krogmann** (Humboldt Fellow from Germany working on Pompilidae and Chalcidoidea) and **Matt Hill** (undergraduate honours student studying Australian Evaniidae) spent much of the time collecting at various sites in and around Flinders Chase National Park using malaise traps, yellow pan traps and sweeping. Apart from a few evaniids, the collecting was relatively poor, mostly because the weather was cold, windy and raining for part of the time. **Lachlan Farrington**, a postdoc working on orchids and their pollinators, found it the perfect time for orchid flowering, collecting specimens of 15 different species. Other members of the group spent time discussing their projects, thesis writing, etc., but it wasn't all work! Most of the group managed to fit in a bit of sight-seeing (Remarkable Rocks, West Bay, Cape Borda). For the overseas members of the group, the fantastic scenery and abundant wildlife proved a great attraction. Some people (Lars knows who I am talking about!) went completely over the top taking huge numbers of photographs of the flora and fauna.

John Jennings attended the 38th AES Conference at Beechworth where he demonstrated the newly released Lucid key: "*An interactive identification guide to the Australasian families of Hymenoptera*" compiled by **Nick Stevens**, **Claire Stephens**, **Muhammad Iqbal**, **John Jennings**, **John LaSalle** & **Andy Austin**.

John Jennings was re-elected Chairman of the Council of Heads of Australian Entomological Collections (CHAEC) at the 18th AGM at Beechworth, Victoria. The meeting was attended by **Cameron Slatyer** and **Alice Wells** (ABRS) who gave updates on the NCRIS funded "Atlas of Living Australia" project and on recent changes to the ABRS Participatory Programme, now known as the National Taxonomy Research Grants Programme.

Gary Taylor is about to commence as a post doc with **Andy Austin**, **John Jennings**, **Matt Purcell** (USDA Australian Biological Control Laboratory) and **Nancy Schellhorn** (CSIRO Division of Entomology) on an ARC Linkage Grant "Systematics and coevolution of insect herbivores on casuarinas: testing phylogenetic congruence for selection of plant biocontrol agents". The casuarinas (sheoaks) are a significant component of the Australian floral landscape. Associated with them are many co-evolved insects, some of which may prove useful as biocontrol agents against Casuarina weeds. Using morphological taxonomy combined with a novel molecular approach, co-evolution of psyllids, scale and gall insects, and weevils will be compared with that of the casuarinas. This project has significant implications for conservation and regeneration of casuarinas in the Australian context and the selection of specific biocontrol agents against casuarinas as environmental weeds

SARDI Entomology

Richard Glatz and **Helen Degraff** attended the 38th AES Conference at Beechworth where Helen presented a paper on screening native plants to reduce populations of western flower thrips.

John Jennings

AUSTRALIAN CAPITAL TERRITORY

ANIC

The enormous task of shuffling, moving, and relocating over one-third of the ANIC cabinets into the new compactus system was completed on September 11th. The electricians are still doing some fine tuning to the control machinery, and there is some cleaning up to do, but the job is essentially finished. The process involved moving a total of 827 cabinets into the compactus, weighing more than 83 tonnes. The cabinet move also triggered a complete re-organisation of some very large collections of books and reprints, office moves for 10 people, and rearrangement of work spaces in the collection halls for staff and volunteers. All of that was accomplished with no significant damage to collections or staff, and we celebrated the completion of the project with a banquet at our favourite Chinese restaurant. Well done to all concerned, especially project co-ordinator Cate Lemann.

David Yeates, Tom Weir, Marianne Horak, Ted Edwards, Rolf Oberprieler, Chris Manchester and Wendy Whitby spent four weeks in July and September on a collecting trip to the Gove Peninsula on the northeastern tip of Arnhem Land. They were joined for parts of that time by Shaun Winterton from the Queensland Department of Primary Industries & Fisheries and Scott Laidlaw from the Commonwealth Department of the Environment and Water Resources. The trip was made possible by funding from the Department of Environment and Water Resources, and by essential support from the Northern Land Council. The Dhimurru Land Management Aboriginal Corporation negotiated access to Yolngu land and, together with NT Parks and Wildlife, provided much needed local knowledge. Alcan Bauxite and Alumina granted access to their mining lease, and we thank all of these organisations for their support. The Gove area was selected for study because it has a distinctive climate, and because very little was known about its insect fauna. Anecdotal information suggested that the fauna of this area could be somewhat different from that of the better known Kakadu area to the west. Although it was officially the dry season, collecting activities were disrupted by a day on which 17.6 mm of rain fell at Nhulunbuy, with more falling at the camp site some 20 km to the south west.

Ted and Marianne reported good species diversity in the Lepidoptera that came to their light sheets, despite a relatively low total number of specimens. Tom found plenty of still and flowing water for collecting semi-aquatic and aquatic fauna, while David and Chris concentrated on finding suitable sites for Malaise trapping. Rolf was keen to collect some male cones from cycads, and obtained permission to collect further west in the Laynhapuy Indigenous Protected Area. Although it wasn't the right season, diligent searching resulted in the collection of weevils from a few late cones. The long process of mounting, labelling and identifying specimens from this expedition has only just begun, but early indications are that many of the species collected are also widespread in Western Arnhem Land while others have affinities with Cape York and Torres Strait.

Work has begun on two new projects funded by the Commonwealth Environment Research

Facilities program (CERF). Brian Heterick of Curtin University of Technology, Perth, has accepted a position as Post-Doctoral Fellow, to undertake a revision of the challenging ant genus Iridomyrmex, which probably includes about 150 species. We also welcome Fiona Spier to another new CERF project, to begin work on Insects of Australia On-line.

The acarology laboratory was a very busy place during July and August. Bruce Halliday was host to a visit by long-term collaborator Professor Jerzy Błoszyk of Adam Mickiewicz University, Poland, with PhD students Magda Dylewska and Agnieszka Napierała, coleopterist Szymon Konwerski, linguist Radovan Dylewski, and Klaudiusz Dylewski, who celebrated his first birthday during the visit. The team worked hard on a series of existing and new projects on mites of the Cohort Uropodina, the results of which should start appearing in print very soon.

The AQIS-funded project to establish a remote diagnostics capacity is making good progress. Darren Peck reports that a node has been installed at AQIS Perth, and tests have shown that it works well. The system's cameras can be mounted easily on both dissecting and compound microscopes, and the associated communications software means that specimens of potential invasive pests (including slide mounted material) can be examined by specialists in distant laboratories. The technology is proving to be a very valuable tool, and opportunities to establish further nodes are now being assessed.

Mike Hodda has been busy travelling. In July he went to the conference of the American Phytopathological Society and Society of Nematologists in San Diego, where he spoke about interactive tools for nematode identification and intra- and inter-species variation in root lesion nematodes. Then in Adelaide, at the Australian Plant Pathology Society conference, he reported on his recent work on beneficial and pest nematodes in pastures. In the Coleoptera team, we welcome Natalie Banks, who is working with Rolf Oberprieler on weevil research and production of the next volume in the series Australian Weevils.

Two entomological publications received Certificates of Commendation in the annual Whitley Awards, which are awarded by the Royal Zoological Society of NSW — A Guide to Australian Moths by Paul Zborowski and Ted Edwards, and the CD On the Fly: The Interactive Atlas and Key to Australian Fly Families by Joanna Hamilton, David Yeates, Anne Hastings, Don Colless, David McAlpine, Dan Bickel, Greg Daniels, Margaret Schneider, Peter Cranston and Steve Marshall. We congratulate the people who were involved in the publications that won these awards, and for forming the successful collaborations that produced them. The Guide to Australian Moths also received some extra recognition when it was formally launched by John Landy.

Laurence Mound headed north to avoid much of Canberra's winter, although looking for thrips at over 40 degrees in Abu Dhabi seemed just a little extreme. Despite the onset of summer there was sufficient drying vegetation still available in the occasional desert wadi to establish a few host-plant relationships for the Environment Agency of the United Arab Emirates. This field work was followed by a visit to the thrips collections of the Natural History Museum, at their present location in a warehouse in South London, to establish the identity of several species described from damaged specimens early in the last century. Back home again, the chore of writing up such observations was interrupted, very pleasantly, by a 10-day visit from Luke Watson of AQIS Melbourne, who needed to learn more about thrips diversity and how to identify species that are taken in quarantine.

Other recent and current visitors to ANIC include David Green of the University of Tasmania, who spent a few days with Bruce Halliday checking the identification of mites from buttongrass moorland, Katja Domes from Darmstadt, Germany, who is working with Stephen Cameron on

molecular systematics and evolution in the mite genus Crotonia, and Doug Hilton of the Walter and Eliza Hall Institute in Melbourne, who spent several days with Marianne Horak and Andreas Zwick learning the fine art of dissecting Lepidoptera.

Bruce HALLIDAY

Above : Tom Weir and a substantial termite mound

ABRS News

We seem to have missed out on reporting lately, but it's not that things have been quiet at ABRS. Our Director, Cameron Slatyer has been busy visiting museums and universities, discussing possible new collaborative projects, and our production line has been pushing out new publications and adding new and newly updated checklists to the Australian Faunal Directory (AFD). Progress has been made on the redevelopment of the software behind the AFD, and we hope that before long, it will be possible to update the checklists online.

ABRS published two new books recently: *Australian Ladybird Beetles (Coleoptera: Coccinellidae)* by Adam Slipinski, and the *Pictorial Atlas of Australasian* Culicoides *Wings (Diptera: Ceratopogonidae)* by Alan Dyce, Glenn Bellis and Michael Muller. Both are well illustrated, and both contain information of interest to general as well as specialist readers; they can be purchased through the ABRS website. *What Wasp is That? An interactive identification guide to the Australasian families of Hymenoptera*, by Stevens et al., published jointly by ABRS

and CBIT, is now available for purchase through the CBIT website.

To the delight of ABRS, CBIT and the many authors involved, *On the Fly, The interactive atlas and key to Australian fly families*, received a Whitley commendation for 2007 from the Royal Zoological Society of New South Wales. These various interactive keys are invaluable for identification of insects and, most importantly, as teaching tools. Both the fly and the wasp keys are useful for other countries in the Australian Region.

Together with representatives of research and collection institutions ABRS has been working hard for some time to raise Government and public awareness of the decline in Australia's taxonomic capacity. ABRS will host a *National Taxonomy Forum* at the Australian Museum, Sydney, from 4-5th October, 2007. The Forum aims to offer research and collection institutions the opportunity to identify and prioritise research and resource needs at a national scale.

As part of the push to improve Australia's taxonomic capacity, ABRS is offering five postdoctoral positions. These will depend upon matching funding being provided by institutions. Offers are being made in September, via institutions — universities, museums, herbaria. ABRS is also offering support for 10 Honours students, studying projects involving taxonomy.

Biologue, the ABRS newsletter, will now be available online, only. Calls for the 2008-09 round of grants will be made in October.

Alice WELLS

VICTORIA

Vic DPI

Dr Kevin Powell Leader of DPIs Phylloxera research program was recently invited to Wageningen University for discussions with plant protection officers, scientists and viticulture industry personal on the risks associated with a phylloxera outbreak in the Netherlands. Although relative small in terms of grape production the viticulture industry in the counbtry is expanding at a rapid rate with the number of vintages expanding almost tenfold since 1997. With this expansion the risk of phylloxera incursions increases as most of the panting material is sourced from other European countries which are not phylloxera free. Kevin then moved on to Hungary for the Fourth International Phylloxera Symposium where he gave oral presentations on phylloxera detection, physiology and quarantine. Other presenters focused on phylloxera-rootstock interactions, phylloxera genetics, biological and cultural control options.

Entomological Society of Victoria

The Entomological Society of Victoria continues to publish the *Victorian Entomologist* and hold bimonthly meetings for its Melbourne members. Scanning the tables of contents shows that the newsletter is lepidopteran-dominated, mostly larval hosts and distribution of butterflies but with some moth articles added for leaven. Discovery of the type of *Neumichtis mesophaea* (Hampson, 1906) (Lepidoptera: Noctuidae) in the Melbourne Museum is reported, and the second specimen of *Molybdurga metallophora* Meyrick, 1897 (Lepidoptera: Heliodinidae) was light-trapped in Tasmania, the first being collected in Melbourne 130 years previously.

The presidential address at the AGM has been taking the format of a discussion of a particular

taxon based on the president's photographs. This year it was the Hemiptera and Peter Marriott's images were supplemented with photographs of types from the Museum collection. Each member went home clutching a little booklet that gave clues to identifying the major families. Our annual excursion was a visit to the aquatic invertebrate collection of the Arthur Rylah Institute where Di Crowther provided lots of samples under microscopes, an entomological first for quite a few of the attendees. Other talks included a review of Golden Sun Moth research in the disappearing grasslands of suburban northeast Melbourne. On two occasions a speaker was unable to attend (the same person each time) so council members leapt into the breach with presentations on aquatic insects, Lucanidae and spiders. Members' nights have become digital photo nights with some spectacular images but often accompanied with a request for identification.

After a very long drought the Society elected a secretary at its AGM; Steve Curle accepted the position and simultaneously applied for membership of the Australian Entomological Society. One of Steve's first tasks was to change our Society's URL to www.entsocvic.org.au which is easier to remember and removes that ~ which was so hard to explain to anyone asking about the site. The other AGM news was the subscriptions had to rise after a record sixteen years at the same rate; however an electronic newsletter rate will be offered from 2008.

Peter McMillan was the 2006 winner of the Le Souëf Award that the Society makes to recognise amateur entomologists. Peter has been a major contributor to the Western Australian Museum's collection with a special interest in the Buprestidae. A full citation was published in our newsletter. Another award that the Society supports is the Science Teacher's Association Science Talent Search. This year our bursary was awarded to Georgia Cheesman & Alice James for their project "Buzz Off - which mosquito repellent is most effective?"

With meetings being held at the Museum some members are taking the opportunity to spend the day in the Collection to identify their own specimens or photographs and two council members, Peter Marriott and Ian Endersby, have been registering the Museum's collections of Moths and the Odonata, respectively. In a reciprocal move, Museum technical staff, Peter Lilywhite, Rachel McBride and Lucinda Gibson, have joined our Society.

Ian ENDERSBY

QUEENSLAND - SOUTH EAST

CSIRO Entomology - Long Pocket Laboratories

Dr. **Mark Lonsdale** has been appointed Chief of CSIRO Entomology and Dr. **Gary Fitt** has accepted the position of Deputy Chief.

Two of Ento's women at Long Pocket shone in the Queensland *Smart Women - Smart State Awards.* **Anne Bourne** won the special Lifetime Contribution to Science Award and **Alice Yeates** was one of four PhD students with University of Queensland to win the category for Postgraduate Students - Science. Alice is co-supervised by Rieks van Klinken). The others in the group were **Megan Ward**, **Nikki Sims** and **Jennifer Firn**.

Above : Lifetime award photo – Paul DeBarro, Anne Bourne, Gary Fitt.

World Cotton Research Conference - 4

Gary Fitt has just returned from the World Cotton Research Conference - 4 in Lubbock, Texas. In his role as a plenary speaker, Gary presented a paper entitled "Resistance Risk and Resistance Management for Bt cotton." He had the opportunity to interact with many colleagues working in the sustainability of GM cottons around the world. He was also able to catch up with colleagues from CIRAD (Centre de coopération internationale en recherche agronomique pour le développement or French Agricultural Research Centre for International Development) in France and discussed BT resistance management strategies for Africa.

National Invertebrate Pest Initiative (NIPI).

As coordinator of NIPI, Gary was pleased with the recent advice from GRDC that Phase 2 has been funded for another three years. This will allow us to build on current activities in research and adoption and launch some new initiatives.

Over 25,000 people engaged with CSIRO Entomology and other CSIRO divisions at the Ekka [Brisbane Show] in Brisbane during August as part of National Science Week. Entomology displayed examples of research including work on the invasion ecology and management of Silverleaf Whitefly and various biocontrol agents for invasive plants including the Melaleuca Gall Fly.

Tim Heard travelled to Brazil and Peru with **Ricardo Segura** to observe several plant species that are invasive in Australia and to determine the best way to do survey work in those countries. The north east of Brazil is one of three semi-arid zones in South America and so needs to be assessed for its suitability for conducting surveys on our target weeds. They found plant samples for future natural enemy surveys and for genetic analysis of plant species including *Parkinsonia aculeata*, *Jatropha gossypiifolia, Lantana camara* and *Phyla canescens*. They also found a rust that European colleagues are seeking as a potential agent for biocontrol of *Ambrosia artemisifolia*. Negotiating horrendous roads through the Andes was challenge but there were wonderful treats too, including eating fired local rodents for lunch. Ricardo and Tim finished their trip with a stopover in Mexico City to conduct interviews for a new staff member for the CSIRO Mexican Field Station to allow continuation of work funded by the Cabomba project.

Linda CHAMBERS

Awards:

Congratulations to staff of the Australian National Insect Collection who have received Certificates of Commendation in the annual Whitley Awards.

This year we have two winners:

The book, A Guide to Australian Moths by **Paul Zborowski** and **Ted Edwards**. Ted is a Post Retirement Fellow in Entomology and Paul is an entomologist and renowned photographer.

The CD On the Fly: The interactive Atlas and Key to Australian Fly Families by **Joanne Hamilton**, **David Yeates**, **Anne Hastings**, **Don Colless**, **David McAlpine**, **Din Bickel**, **Greg Daniels**, **Margaret Schneider**, **Peter Cranston** & **Steve Marshall**. The CD is a collaborative effort between CSIRO, the Australian Museum, University of Queensland, University of California (Davis) and University of Guelph, Canada.

The Whitley Awards are presented each year by the Royal Zoological Society of NSW for outstanding publications (in printed or electronic form) that contain a significant amount of information relating to the fauna of the Australasian region. For more information see http://www.rzsnsw.org.au/Whitleys.htm

Don SANDS

DPI&F, Indooroopilly

Food Protection Team

Greg Daglish spoke at the GRDC Grains Research Update in Emerald on 25 July on the topic of insect management and resistance challenges for farmers storing grain. The Board of the CRC for National Plant Biosecurity and CEO, Dr **Simon McKirdy,** visited the Indooroopilly laboratories in August. During this visit they discussed research projects with entomologists **Pat Collins** and **Manoj Nayak**. Pat has also been active representing the CRCPlant Biosecurity at the Australasian Post-harvest Conference, Agriculture Australia Conference and Grains West Expo where he outlined some of the work being undertaken by the CRCNPB for the grain industry.

Manoj is leading a CRC-funded project on monitoring and management of fumigant and insecticide resistance in stored grain insects.

Manoj NAYAK

UQ School of Integrative Biology, Entomology

Meron Zalucki attended the Vth International Conference on the Biology of Butterflies in Rome from 2-7 July and gave a joint paper with **Steve Malcolm** in a symposium in honour of Lincoln Brower entitled: "What the Dickens is going on with Monarchs and milkweeds? A tale of two continents". **Mike Furlong**, **Bronwyn Walsh** and Meron spent time in Fiji and Samoa at Farmers field schools as part of the ACIAR Brassica project in the South Pacific. Mike has also visited CABI-Europe in Delemont, Switzerland and gave an invited seminar "Integration of endemic natural enemies and *Bacillus thuringiensis* to manage insect pests of *Brassica* crops in North Korea".

Corinna Lange recently returned from a *Helicoverpa* collecting expedition into central Australia and promptly attended the Northern Farming Systems IPM Researchers Forum along with Lynda Perkins. **James Hereward** has also been undertaking extensive field work, collecting mirids that are pests of cotton.

Chris Simon (University of Connecticut, USA) visited SIB in July and presented a seminar on her current work on the systematics and evolution of Australian and New Zealand cicadas. She also had meetings with local cicada experts **Lindsay Popple** and **Tony Ewart**. **Judith Reinhart** (Queensland Brain Institute) gave a talk on honeybee learning and this will be followed-up with a seminar by **Mandyam Srinivasan** (QBI) on the application of knowledge of honey bee vision and learning to robotics.

Current visitors to SIB include **Hiroaki Takeuchi,** from the National Agricultural Research Centre for Kyushu, who is visiting Meron and Mike Furlong for a year. Hiroaki will be working on modelling foraging behaviour of Large Cabbage Moth caterpillars on cabbages. **Edouard Henri Tonnang Zefack** from ICIPE is visiting for 6 weeks to work with Meron, Mike and Bob Sutherst on using CLIMEX to model DBM populations. **Scott Carroll** (UC Davis) has recently arrived in SIB, this time on a Fulbright Alumni Initiatives Grant. Scott is looking to make linkages with folk interested in Evolutionary Conservation Biology. **Stefan Schmidt** and **Olga Schmidt** are visiting **Gimme Walter** for two months. Stefan is studying *Melaleuca* oil retention (and expulsion) in the digestive system of *Pergagrapta* sawflies with **Anne-Marie McKinnon**. Olga is conducting field work in south-east Queensland as part of her research on the taxonomy of geometrid moths (subfamily Laurentiinae).

Mary Finlay-Doney (recent PhD graduate) has taken up a position as Australian Youth Ambassador for Development with the Plant Protection Centre in Laos. She is helping to set up a new arthropod collection and assisting in the development of capacity for pest surveillance, monitoring and identification.

There have been several recent PhD completions. Congratulations to **Robert Charles George** for his PhD on habitat modelling for fireants. **Anna Kuballa** was awarded her PhD in June. She used microarrays to analyze gene expression associated with moulting in crabs, in a project based at Bribie Island Aquaculture Research Centre. **Glenn Graham**'s PhD was awarded in July 2006. He studied the phylogenetics of dacine fruit flies. **Darren Wong** submitted in July. He examined resilin expression in *Drosophila* and isolated the resilin gene from the flea and the buffalo fly, in a joint project with CSIRO Livestock Industries. Darren then travelled to the USA to investigate possible postdoctoral opportunites. **Adriana Najar-Rodriguez** also submitted in July.

She studied biocontrol of the cotton aphid (*Aphis gossypii*) in Australia, including its host-plant preferences, the feasibility of using petroleum sprays in aphid control and the mode of action by which these sprays kill individual aphids.

New starters in SIB include **Ezekial Golan**, who recently joined the caterpillar modelling group to undertake a PhD project. Ezekial is jointly supervised by Meron and **Jim Hanan** (Computation Science). **Gunter Maywald** has begun his PhD project on the systematics and evolution of paropsine beetles, with advisors **Chris Reid** (AM), **Shaun Winterton**, **Dave Merritt** and **Lyn Cook**.

Postgraduate students in the **O'Neill** lab have made good recent progress. **Geoffrey Pittman**, who is characterising symbionts that reside within the gut of the greyback scarab beetle (*Dermolepida albohirtum*), has successfully identified and genetically manipulated one of the bacterial symbionts. He has also demonstrated that this symbiont can be fed back to the larvae, paving the way for the development of a biocontrol agent for this important sugar cane pest. **Peter Cook** has developed a new molecular method to determine the age of individuals of *Aedes aegypti.* The method works well in the lab and the field, and Peter has recently applied his technique to assess how the age structure of natural populations in Cairns fluctuates with season. Peter is currently writing his thesis before continuing his research on *Ae. aegypti* biology at the University of Oxford. **Conor McMeniman** has focused his efforts on successfully infecting *Ae. aegypti* with a virulent strain of *Wolbachia* (a bacterial symbiont). As this strain shortens the life span of *Drosophila* species, it is hoped that *Wolbachia*-infected mosquitoes should also have reduced adult span, thereby reducing the transmission rates of dengue virus. Conor has successfully established *Wolbachia* infected *Ae. aegypti* lines and is currently assessing a range of life-history traits, including life-span, to determine if a reduction in dengue virus transmission is likely. Recently Conor was able to communicate his findings with leading researchers at *The Third International Meeting on Molecular and Population Biology of Mosquitoes and other Disease Vectors*, held in Crete.

Lyn COOK

QUEENSLAND – FAR NORTH

QDPIF - Cairns

Jane Royer headed out into the vast unknowns of Cape York on a routine surveillance trip. Reports are that the electric ant eradication is proceeding with another round of baiting in progress.

QDPIF – Mareeba

Ross Storey was greatly saddened by the loss of **Elizabeth Exley** who did so much for the education of Australian entomologists over at least 20 years of her 'working' career. Ross remembers collecting euryglossine bees with Elizabeth through NT and WA in the mid 70's. **David Rentz** continues to visit the DPI entomology lab to assist in the identifications of moths and to sort the collection, but also to catch up on the gossip. There are now close to 1000 moths identified – if David is stumped on a particular ID, he is able to jpeg Ted Edwards for assistance.

Left: Spotted at the Far Northern Great Entomological BBQ was Scott Ritchie sporting his cicada t-shirt while enjoying a cicada cappuccino.

Paul Zborowski is currently in Costa Rica with his trusty camera taking pictures of various insects for his new project. Paul and **Ted Edwards** collaboration 'A Guide to Australian Moths' has just been published and described as 'An easy-to-read guide to Australian moths, featuring more than 400 high quality photograghs', so go get yerself one!

AQIS – Cairns

Tony Postle attended the funeral of Elizabeth Exley on September 7th. Tony recalls Elizabeth as a good collegue and friend, and the presence of many of Elizabeths former post-graduates and work collegues to pay their last respects was a testimony to the esteem in which she was held. Tony has conducted several surveillance surveys to north west Cape York beaches searching for exotic pests such as termites, ants and borers which may be associated with the timber from washed up illegal foreign fishing vessels. No pests present, but an old rusty nail penetrated quite a way into the leather of Tonys foot. Tony noticed that local termites has made a mess of some of the timber, with *Schedorhinotermes* sp. constructing large galleries through the sand to reach the timber.

AQIS – Mareeba

The NAQS lab is fairly quiet at the moment. **Barbara Waterhouse** is taking long service leave and **Kerrie Huxham** is on holidays. Botanist **Louise Hucks** has resigned from AQIS and is now working with QDPIF in their molecular lab. **Anthony Rice** attended the AES conference, and plant pathologist **Richard Davis** has rejoined AQIS after several years working in Fiji.

Far Northern Great Entomological Barbecue

Northern insect enthusiasts gathered at the home of Max Moulds and Margaret Humphrey at Kuranda on 16th June for the ultimate entomological barbecue. Max and Margaret have recently, like so many other southern entos, realised that they should live where the most bugs are found

and headed north from Sydney to more tropical climes.

Surprisingly almost 30 entomologists were able to make it and not anyone knew everyone although Ross Storey came close! Who knew there were so many entomologists floating about in the regional ether! Max and Margaret's hospitality knew no bounds and all were wined and dined while three light sheets provided entomological entertainment. The conditions on the evening were cool and while insect activity was reduced the word is that several 'good things' were taken or photographed at the lights, despite the inevitable conflict between collectors and photographers that provided entertainment for bystanders.

A great night was had by all (despite those pesky leeches) and everyone is keen on having a repeat some time for those who unfortunately were unable to make it along.

JCU – Cairns

Congratulations to **Peter Grimbacher**, who has successfully been awarded his PhD for his thesis entitled 'Beetle assemblage responses to rainforest deforestation and reforestation in north-eastern Australia'. Peter will be around JCU for a while longer to continue the beetle biodiversity work through **Nigel Stork**s University of Melbourne group. JCU recently hosted the 'Cyclone Science Seminar - Impacts of Cyclones on Terrestrial Tropical Ecosystems - Insights from Severe Cyclones Larry and Monica', at which Peter presented 'How do insects respond to cyclonic disturbance of a fragmented rainforest landscape?'.

Kylie Anderson has been invited to speak at the 10th International Plant Virus Epidemiology (IPVE) symposium to be held in mid October at the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), situated in Hyderabad, India.

The theme of the symposium is 'Controlling Epidemics of Emerging and Established Plant Virus Diseases - The Way Forward'. Kylie will be discussing results from the *Eumetopina flavipes* (vector of Ramu Stunt disease of sugarcane) project, with funding kindly provided by ACIAR.

Mosquito-borne Diseases Centre, JCU - Cairns

Postdoc researchers **Luke Rapley** and **Petrina Johnson**, under the guidance of **Scott Ritchie**, are parading through the backyards of far north Queensland after the dengue mosquito, *Aedes aegypti*. Luke is working on the development of 'lure and kill' technology for the control of dengue vectors (NHMRC Project Grant), while Petrina is conducting field research for the Bill and Melinda Gates Foundation project 'Modifying mosquito population age structure to eliminate dengue transmission' (headed by **Scott O'Neill** at UQ). **Sharron Long**, a MSc candidate at JCU, is also involved in the Gates project and is investigating a biodegradable 'lure and kill' lethal ovitrap for *Ae. aegypti* control. PhD student **Tamara Ball** is investigating the efficiency/ sampling bias of the BG-sentinel trap to measure population structure of *Aedes aegypti* in north Queensland.

Kylie ANDERSON

WESTERN AUSTRALIA

Ian Dadour has recently returned from 3 months sabbatical at the University of Tennessee (Knoxville).. During his time at the Anthropological Research Centre he continued his work on

decomposing bodies in wheelie bins. This was also the 4th year that he was invited to teach Forensic entomology on the FBI Human Remains Recovery course. Due to his extended stay in the US he also taught FE into the Human Taphonomy course for National and local Law enforcement. During this period and in collaboration with Murray Marks (Director of the Centre) he completed all the decomposition work for publication of a new atlas of decomposition. He also attended the 51st Livestock Insect Workers Conference in Lexington Kentucky and spoke about fly breeding in treated human waste. This is an ongoing project with the Water Corporation in Western Australia. A new advanced course was conducted this semester in Forensic Entomology titled Insects as Biological Clocks: Postmortem Intervals. The course was co designed and conducted by Sasha Vos as part of her 2007 teaching internship.

Two Master students have almost completed their theses: Yvette Hitchin, Development of a multiplex PCR reaction using sequence specific primers for the identification of seven known Calliphoridae species and Ha Nguyen The use of microsatellite markers in the differentiation of closely related forensically important *Calliphora* species (Diptera:Calliphoridae) in Western Australia.

Sonya BROUGHTON

CONFERENCE REPORT

Australian Entomological Society's 38th Annual General Meeting and Scientific Conference – Beechworth 23-26 September 2007

The AES AGM and Scientific Conference was held at La Trobe University in Beechworth from 23-26 September 2007. The meeting ran well until the very last powerpoint – after the AV technician had just left to catch his plane – but eventually it worked.

The Conference had six main scientific themes: Biosecurity and Plant Protection, Biodiversity, Climate Change, Environmental Disturbance, Conservation, and Systematics, Diagnostics and Biometrics. The presentations involved a very interesting mixture of 46 key note speakers and presentations. The keynote speakers were James Ridsdill Smith (Biosecurity and Plant Protection). Nigel Stork (Biodiversity), Ken Green, Lynda Chambers, Ian Mansergh and Ary Hoffman (Climate Change), and Jonathan Majer (Environmental Disturbance).

La Trobe University at Beechworth is the site of the old mental hospital. It was an ideal location for the meeting – peaceful garden atmosphere, but within walking distance of the historic township. The conference must have been interesting because most registrants sat through the presentations and few disappeared to sample the food and wine delights of the region.

This is the first stand alone AES Conference since 2003 (the ICE in 2004, then joint conferences in 2005 and 2006). The number of competing conferences probably reduced the number of registrants (80), but the small numbers allowed the organisers to arrange long tea and lunch breaks (for scientific discussion!), and something that was much appreciated – no concurrent sessions. Registrants appreciated the posters, the illustrations and photographic competitions, and the student presentations.

Thanks are due to the Organising Committee (Nick Collett, John Hawking, Amanda Kobelt, David Madge, Tim New, Kevin Powell, Phil Suter, Ken Walker and David Williams), the sponsors (Department of Primary Industries Victoria, Department of Sustainability and Environment Victoria, CRC Plant Biosecurity, North Central Catchment Management Authority, Wiley-

Blackwell and Cambridge University Press), and special thanks to Sally Brown (Conference organiser) and her staff.

Alan YEN, Chair Organising Committee

OBITUARIES

Elizabeth Morris Exley

Elizabeth Morris Exley was born in Brisbane in 1927, the first child of Arthur Eric John Exley and Elizabeth Francis Morris. Elizabeth attended Rainworth State School in her primary school years, and from 1941 to 1944 attended Brisbane Girls' Grammar School. Elizabeth completed her B.Sc. at the University of Queensland in 1948 and joined the Department of Zoology and Entomology as a Demonstrator. She was awarded B.Sc. Honours in 1950, her research topic was the larvae of Trypetidae (fruit flies). In 1952 Elizabeth traveled to London to take up a fellowship at Imperial College, University of London, where she continued her study of fruit fly larvae, and received a Diploma of Imperial College in 1954.

On her return to Brisbane that year Elizabeth joined the Queensland Department of Agriculture as an entomologist and again worked on fruit flies. However she could not see along-term career in the Government Department.

Following the award of an M.Sc. from the University of Queensland , Elizabeth rejoined the Entomology Department in 1958 as a tutor and later lecturer. She remained in the Department until her retirement as Associate Professor in 1992.

Initially her research involved the systematics of ants. However her interest in native bees was inspired by Professor Charles Michener, a world authority on bees from University of Kansas, who was visiting Queensland during preparation of his monograph on the bees of Australia and the South Pacific. Elizabeth realised how little was known of the native bee fauna of Australia. Michener encouraged her to study the systematics of the tiny bees in the family Colletidae, sub-family Euryglossinae, an endemic Australian group with hundreds of species which associate mostly with Australia's myrtaceous flora, specially the eucalypts. Their study was to become her life's work and she received her Doctorate in 1968 for her taxonomic thesis on the Euryglossinae.

Elizabeth was a pioneer of research into Australian bees, and she was a role model for women in an era when many organisations, including government departments, discriminated against

women scientists, no matter how talented.

For many years Elizabeth made regular collecting trips, particularly in northern Australia, and her students and research assistants often traveled with her. Her bees were most common in the tropics, where they collected nectar and pollen in blossom in the tops of trees. To reach them she had special insect nets made, with handles several meters long, which were supported in a leather harness. Collecting trips were fun, they were also hard work – out in the sun collecting from blossoms all day, the nets were heavy and awkward, and swinging them often resulted in sore back and shoulders and bruised legs. The evenings were spent sorting and storing the day's catch. Very little was allowed to stand between Elizabeth and her bees. I was once instructed to collect from the flowers of a particularly luxuriant Leptospermum in the grounds of a large church in Toowoomba, while the wedding party being photographed nearby looked on in amazement, Robbin Thorpe, who was visiting from the States, hid behind a convenient mail box. Ken Walker had very close encounters with green ants' nests and an irate, rifle-wielding land owner in North Queensland, indeed Ken, Ross Storey, Tim Lowe and others could probably write a book about their experiences collecting bees. The many thousands of bees of all families collected on these trips, and by her students, are stored in the University of Queensland Insect Collection, they are a significant resource for bee researchers.

Elizabeth visited Universities, Museums and bee researchers and collections in many countries, including several to the hub of the bee research world, Michener's laboratories and the Snow Entomological Museum in Kansas, and to the Natural History Museum in London and Hope collections in Oxford, both of which hold many Australian bee types. In the 1980s her research extended into insect pollination of crops such as lychee, macadamia, pigeon pea and custard apple, some of this work in collaboration with CSIRO.

After her retirement in 1992 the work on the systematics of the Euryglossinae continued. She has collected, described and named more than 230 new species, with another publication still in review. Her death is a great loss to bee research and to entomology in general.

Elizabeth was also a teacher, she enjoyed lecturing and talking with students, and made a significant contribution to the education of entomologists in Australia. Her undergraduate teaching was mainly in insect systematics and insect morphology. She passionately believed in the importance of systematics as a basic part of entomology studies. Her standards were high and the courses of lectures and practicals were demanding, lectures were packed with information and practicals were very busy. Undergraduates majoring in entomology finished their degrees with a thorough grounding in both systematics and morphology. As a lecturer she was liked and respected by the students.

Although most of Elizabeth's research involved the Euryglossinae her postgraduate students studied many different groups, including other bee families, wasps, butterflies, flies, beetles and spiders. As a supervisor she guided rather than directed. She was generous with her time, always ready to listen and discuss, forthright with her opinions and usually considerate of your feelings, and meticulous in checking detail. She was also concerned for the welfare of her own and others' students. Her postgraduate students are now in the midst of, or retired from, careers in Government departments, Museums and Universities and private industry, in science, policy and administration. Her last PhD student, Chris Burwell, is at the Queensland Museum where the Director and Chief Executive is Ian Galloway, one of her first PhD students.

Elizabeth took an active part in University administration. She was Head of the Department of Entomology in 1982 and served on University committees including the Boards of the Faculty of Science and the Faculty of Agriculture and the Standing Committee of Convocation.

Elizabeth was a Life Member of the Queensland Entomological Society, which she joined in 1948. She served as honorary secretary, and Councillor, and was elected President in 1968, only the second female President of the Society. In 1962, while Elizabeth was Proceedings Editor, she was involved in getting the Journal of the Entomological Society of Queensland started. This Journal later became the Journal of the Australian Entomology Society and later still the Australian Journal of Entomology. Elizabeth strongly supported the Queensland Society and continued to attend meetings until fairly recently, her knowledge of the society' history and constitution will be missed.

Elizabeth was also an Honorary Life Member of the Australian Entomological Society, which she joined when it was established in August 1965. She attended the first annual general meeting in 1967 and was a member of the society's Council from 1970 to 1972.

Elizabeth has left a huge body of information on Australia's rich bee fauna, from her own work and that of her students. She maintained her belief in the importance of systematics, and passed it on to her rigorously trained post-graduate students, some of whom, in turn will pass it on to their students. Her undergraduate and post graduate students have contributed significantly to entomology in Australia and overseas. Entomologists and other colleagues will remember her fondly and with admiration for her dedication to research and education in her chosen field.

Elizabeth's other love was her family. She shared with us, her postgraduates and colleagues, her niece Elizabeth's progress through school and university, her marriage to Robert, the birth of their three children, and their family trips overseas and their holidays at the house at Bilinga on the Gold Coast. Elizabeth was a terrific swimmer and body surfer.

I first met Elizabeth in the mid 70's, when I was a mature part time student. I enrolled in Introductory Entomology, ET 201, because it was the only thing offered in the evening where I had available time. A few lectures from Elizabeth, and a little help from Tom Woodward, and I abandoned my previous plans - I wanted to be an entomologist. I thank Elizabeth for encouraging me into the complex and marvelous world of insects – the fascination has been with me for half my life, and will remain for the rest of my life.

A final word from Emeritus Professor Charles Michener, Mich, who started Elizabeth on her journey with bees. In an email to me he said 'People in the bee community will remember her into the indefinite future.' I think that sentiment also applies to many in the non-bee entomological community.

Ernest Edward Adams

Ernest Adams was born at Rockhampton, Queensland, the second child of Edward and Olive Adams, who were cattle farmers on Merion Station. Later they moved to Honeycomb and in 1926 the family purchased Mourangee Station, Edungalba, where they raised cattle. Ernest, his brother and sister all attended the Edungalba State School using horses to get them the 4/5 miles each way. As he grew up he and his brother Norman earned pocket money by snaring wallabies and selling their skins. At around 8 Ernest was encouraged in his interest in collecting insects by Charles Barnard who gave him a book on entomology and supplied him with pins. At around 20 Ernest met Close Vallis of Rockhampton, who was also interested in collecting insects and together with Stan Brock they commenced making collecting trips. In January 1940 Ernest met H. W. (Horace) Brown and Bill du Boulay who persuaded him to specialize in collecting buprestids. He had early correspondence with Ned Sutton and Alec Gemmell of Fletcher, Queensland, both enthusiastic buprestid collectors. Later, among other people he corresponded with Jean Harslett, Camille Deuquet, Jack Macqueen, Kinder Smith, George

Brooks, Charles Gooding, Keith & Edith Carnaby, Keith Hately, Gordon Burns, myself and many others.

I first met Ernest in person in 1975 when I visited Mourangee on a field trip. On that occasion Ernest took me to Blackdown Tablelands for the first time. Several years later I made a long trip with Ernest to Paluma and stayed at his home on several other trips. One memorable feat of Ernest's was his climbing ability. He used the aboriginal technique of putting both arms around the trunk of a tree, splaying out his bare-footed big toes and walking up the trunk. It takes great strength and agility and Ernest was adept at doing it. He would climb a flowering eucalypt, sit in the fork of a branch and use a long handled net to collect buprestids visiting the flowers. The last time I saw him climb was on a visit with my son. Ernest was around 70 and had cracked his pelvis the year before in a horse riding accident. He had no difficulty climbing into the branches of a *Eucalyptus*.

Ernest went to great lengths to make sure that the buprestid populations resident on Mourangee flourished. In one of his paddocks he diverted the course of a small creek so that it watered a young stand of a native *Eucalyptus* host to *Chalcotaenia* sp. and *Cyphagastra* sp. He showed me how to spot the beetles on the small host trees by gently tapping the trunk of the tree with the back of an axe disturbing the beetles which flew to the next tree. On a rise close to the homestead Ernest had a grove of Morton Bay ash, host to the larvae of *Polycesta mastersi*. He periodically ringbarked one of the trees so that the adult beetles had freshly dying trees to oviposit into. Ernest was thus able to demonstrate the occupied galleries in those trees to visiting collectors like myself. Ernest was a mine of information on collecting. He showed me how to find buprestids, normally high in the canopy of flowering *Eucalyptus*, on tall grass growing around such trees. Some beetles get blown out of trees in the evening or during the night when they are too cold to fly. They survive predation by climbing up grass stalks and waiting until morning to warm up and fly to safety. They are easily collected late in the afternoon or at first light. Mourangee is a very good area for buprestds and I've named several species of *Castiarina* and *Astraeus* in Ernest's honour.

Ernest was an immense help with my own studies as well as being a wonderful friend. He was unfailingly generous with specimens and sent me anything that he thought might be new. Over the years I had a fruitful correspondence and exchange of specimens with him. His help to me was acknowledged by the University of Adelaide, who granted him the honorary title Field Associate of the University over two three year terms. He would be gratified to know that his second son Eddie is now working as an entomologist. Ernest, a devoted family man, is survived by his wife Mavis, daughters Jean and Bev and sons Rob, Eddie and Stuart, 12 grand-children and 15 great grand-children.

Shelley BARKER

GENERAL INTEREST

Honoured with street name

Well known and respected former member of the Society, the late Doug Waterhouse, has been immortalised by way of a major road in the Canberra suburb of Dunlop. "Douglas Waterhouse Drive" is a feeder road in a relatively new subdivision very close to the north-western border between NSW and the ACT.

The following is reproduced from: www.legislation.act.gov

This is Page One of Four of the Schedule to the Instrument signed by the Delegate of the Minister on the 25th day of February 2003.

PUBLIC PLACE NAMES 2003, NO. 1 (Street Nomenclature - Dunlop)

Division of Dunlop: Inventors, Inventions and Artists

NAME : Douglas Waterhouse Drive

ORIGIN: Dr Douglas Waterhouse AO (1916-2000)

SIGNIFICANCE: Australian Inventor and Entomologist

Dr Waterhouse was the inventor of the key component in one of Australia's most famous insect repellents, Aerogard. He also had a major input into reducing the annoyance of flies in rural Australia with a major involvement in the dung beetle project, which saw CSIRO introduce over 50 species of dung beetles into Australia. They successfully attacked the problem of pasture fouling caused by European cattle, and the increasing numbers of dung-breeding flies, especially the bush fly.

Dr Waterhouse was elected as a Fellow of the Royal Society, Fellow of the Australian Academy of Science and Fellow of the Australian Academy of Technological Sciences and Engineering. He was made an Officer of the Order of Australia (AO) in 1980. He published over 100 scientific papers and several books.

The photograph was taken by AES Treasurer Graham Thwaite and, in continuing his adventure through the suburbs to indirectly arrive at CSIRO Entomology, he also managed to pass by Tillyard Drive, a name synonymous with another Australian entomological pioneer.

AES President awarded prestigious Mueller Medal

Curtin University of Technology's Head of Environmental Biology Professor Jonathan Majer has been recognised by the Australian and New Zealand Association for the Advancement of Science (ANZAAS) for his outstanding contribution to world science.

At a ceremony held today at the Sheraton Perth Hotel, the ANZAAS Council awarded the

Mueller Medal for 2006 to Professor Majer for his pioneering research in the challenging discipline of entomology.

According to ANZAAS Chair Dr Michael Murray, Professor Majer's contributions to forest management and land reclamation are internationally acclaimed.

"Professor Majer's commitment to the advancement and promotion of science make him an outstanding role model for students and a worthy recipient of the Mueller Medal in 2006," Dr Murray explained.

"He has an amazing ability to convey the results of his research and varying viewpoints to the general public in a simple manner, so they can better understand some of the important conservation and land management issues facing the community today."

Professor Majer's research is aimed at providing information for improving the conservation of invertebrates and those vertebrates that depend on them, and for the control of pests of arboreal crops in the tropics.

He consults on forest conservation management issues in the Australian tropics as well as overseas, especially in Brazil, and is frequently asked to speak at conferences, in schools, to special interest groups and to the media.

The Mueller Medal was initiated by the ANZAAS Council in 1902 to honour Baron Sir Ferdinand von Mueller, one of Australia's great pioneers of exploration and science, who arrived in Australia in 1847 and was the Government Botanist of Victoria for 44 years.

The Medal is awarded at the annual ANZAAS Congress to a scientist who has made important contributions to anthropological, botanical, geological or zoological science, preferably with special reference to Australia.

REVIEW

If you would like to review — 'What wasp is that? An interactive identification guide to the Australasian families of Hymenoptera' by *N.B.Stevens, C.J.Stephens, Muhammad Iqbal, J.T.Jennings, J.La Salle & A.D.Austin.* Please contact me at asimmons@csu.edu.au

MEMBERSHIP NOMINATION FORM

To obtain a nomination form, please download from http://www.agric.nsw.gov.au/Hort/ascu/myrmecia/aesmemform.pdf.

Below: Participants at the Far Northern Great Entomological BBQ. Left to Right:- TOP ROW: David Rentz, Tony Postle, Mike Cermak, John Olive, Peter Grimbacher, Jeff Watson, Paul Zborowski, James Walker, Scott Ritchie, Harry Fay, Garry Sankowsky, Peter Shanahan, David Lane, Ian Hill, Robert Ham. BOTTOM ROW: Ross Storey, Ros Blanche, Sally Cowan, Leonie Wittenburg, Margaret Humphrey, Max Moulds, Richard Piper, Michael Gorton, Kerrie Huxham, Mohamed Sallam. Missing: Donna Baldwin, Rob Bauer, David Hancock, Buck Richardson, Judy Thompson.

Above: AES Beechworth conference organizing committee - Kylie Elston, John Hawking, Phil Suter, Alan Yen, Dave Williams, Dave Madge, Kevin Powell, Amanda Kobelt Absent - Tim New, Nick Collett and Ken Walker **Below:** Di Crowther, Olivia Kvedaras, Geoff Gurr (of course), Sagrario Gamez Virues, John Jennings and Murray Fletcher Enjoying the welcome reception

Above: Alice Wells, Maria de Souza, Maze Majer, Jonathan Majer, Ian Endersby enjoying the welcome reception **Below:** Sagrario Gamez Virues receives her Phil Carne Prize certificate from President Jonathen Majer

Above: Leigh Pilkington (NSW DPI), Alice Wells (ABRS) and Phil Suter (LaTrobe Univ) at the dinner **Below:** Adrian Nicholas, Graham Thwaite and Richard Faulder at the dinner

More conference photos can be found at ww.agric.nsw.gov.au/Hort/ascu/myrmecia/aes2007.htm